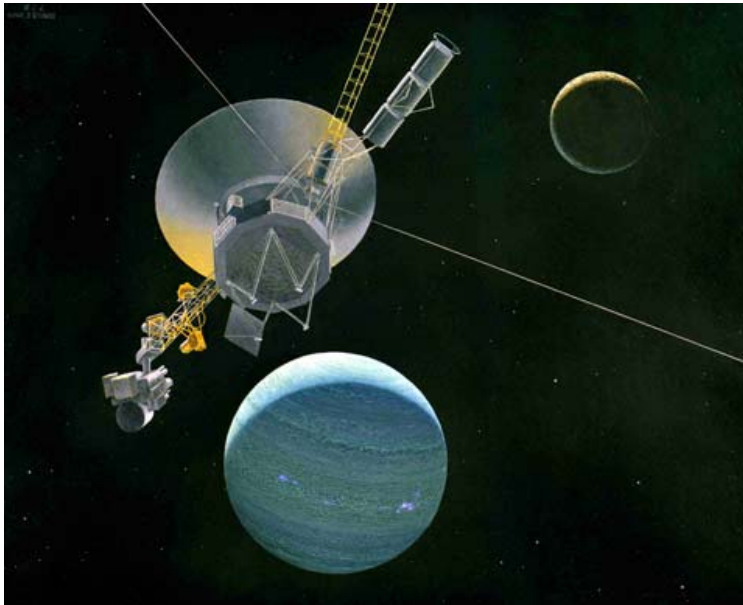


Neptune

Historical Images of Voyager's Grand Tour



Voyager at Neptune/Triton, P-23836B

Artist's conception of the Voyager 2 spacecraft as it would look passing close to Neptune and Triton.



High Clouds, P-34705

False-color imaging better defines the thickness of high clouds in Neptune's atmosphere, here shown as white or bright red (the high altitude haze layer at the planet's limb). Measuring these clouds indicates to scientists how the Sun's feeble light scatters in the atmosphere. Such a high cloud formed the white streak near the Great Dark Spot.



Great Dark Spot, P-34648

Although the smallest of our solar system's four gaseous giant planets, Neptune's volume could hold 57.7 Earths. In this image, reconstructed from two images taken by Voyager 2 in August 1989, Neptune's Great Dark Spot is overlain by bright clouds of methane ice crystals. Neptune's blue color results from absorption of red light by the methane in its atmosphere.



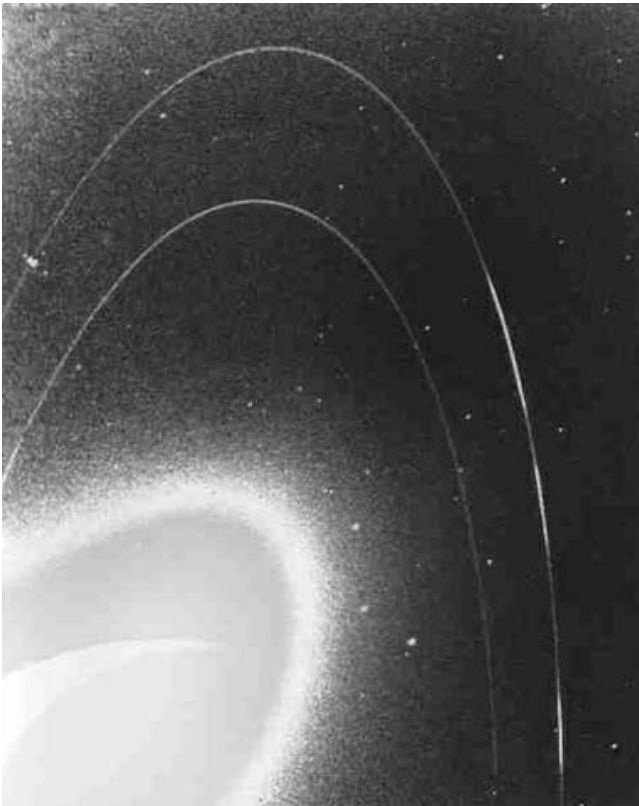
Bright Clouds, P-34709

Some bright clouds of Neptune, 30 to 125 miles long (casting shadows on a denser cloud deck below them), floated in the planet's high, cold methane atmosphere as Voyager 2 passed 97,000 miles away in August 1989.



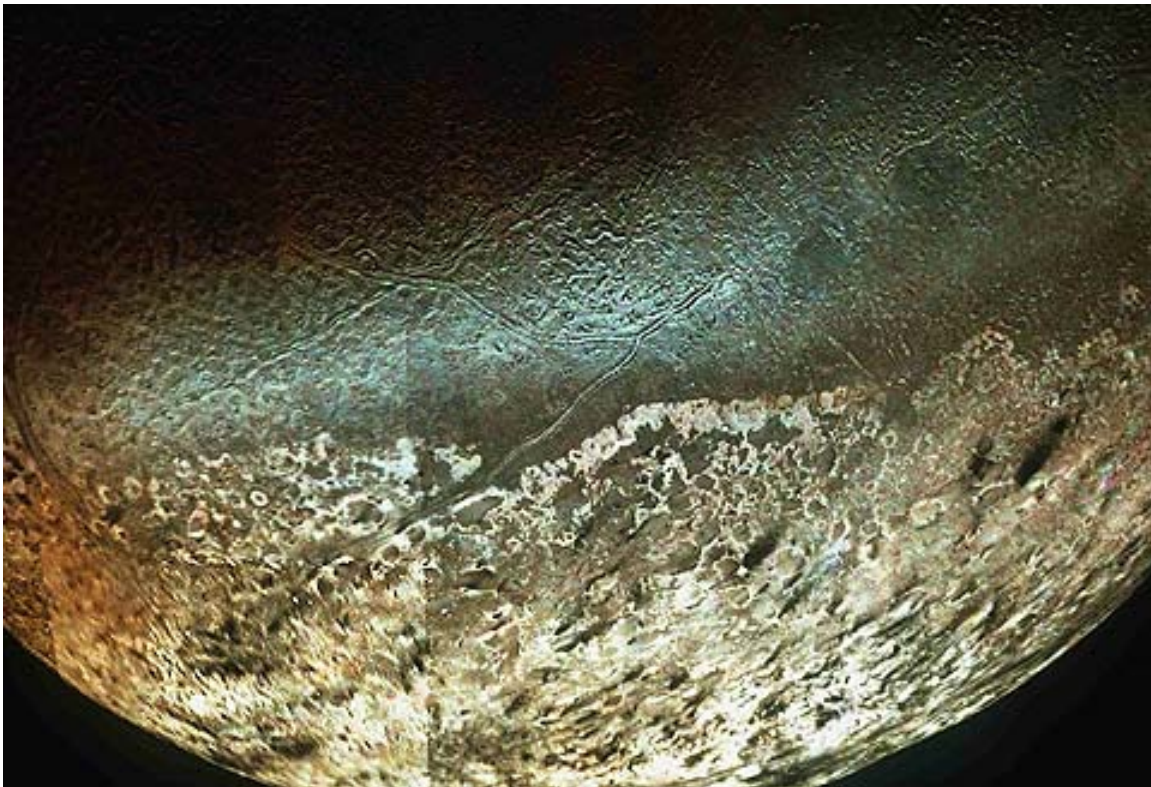
Neptune/Triton, P-35131

Although not to relative scale, Neptune and its main satellite, icy Triton, are seen together in this montage. Triton has the coldest surface, about minus 390° F., of any of the more than 60 planetary objects observed by the two Voyager spacecraft.



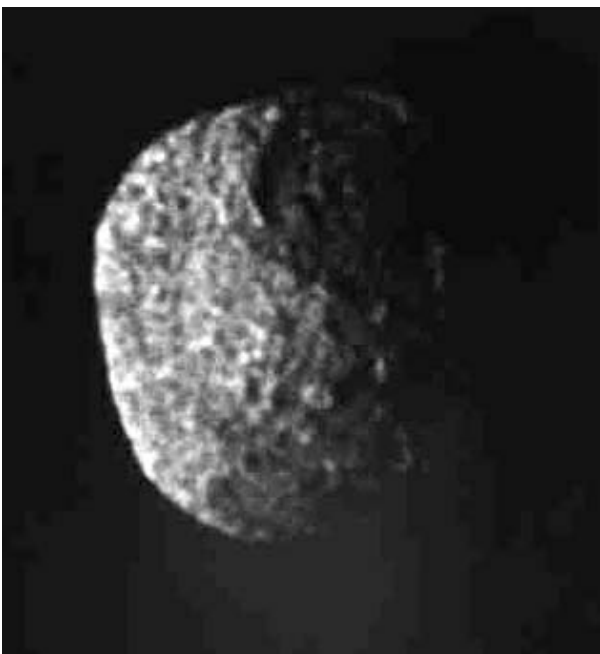
Ring System, P-34712

Through overexposure of the planet itself, Neptune's faint ring system could be imaged by Voyager 2 from 680,000 miles away.



Triton, P-34764

The influence of Neptune's gravity previously captured Triton and brought it into an orbit around the planet. The evidence of this is Triton's highly tilted orbit in relation to Neptune's equator and its orbital motion opposite to Neptune's direction of rotation. Many Voyager 2 images were placed together to create this image of Triton's 'cantaloupe skin' surface. Lacking many impact craters but covered with rough depressions and ridges may mean Triton has a young surface (by Solar System standards), less than 2-3 billion years old. Nitrogen geysers erupted during the Voyager flyby.



Proteus, P-34727

Voyager 2 discovered six new moons at Neptune, adding to the two already known. One of the new moons, Proteus, about 250 miles in diameter, reflects from its dark gray surface of craters and grooves only 6% of the sun light it receives. It is one of the darkest objects in the Solar System.



Neptune and Triton Crescents, P-34761

When Voyager 2 left Neptune in August 1989, its path led away from any other planets, bending 48° below the ecliptic plane and--like Voyager 1 toward the outer edge of the Sun's radiation-influence, the heliopause. As it looked back, Voyager 2 imaged the crescent shapes of Neptune and its moon, Triton. Moving away from the Sun, the two craft traveled about 35,000 to 38,000 miles per hour. Voyager 1 in November 1996 was over 9 light-hours (more than 6 billion miles) away from Earth.

These images are part of
located at <http://beacon.jpl.nasa.gov>



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